

# Functional Requirements:

## **1) Patient Management:**

- 1.1 The patients must register their accounts.
- 1.2 The patients will be able to login to their accounts.
- 1.3 The patients will be able to view their updated and saved records.
- 1.4 The patients will be able to go through with their doctor visit even if they forget their medical book at home.
- 1.5 The patients will have the choice to pay offline or online.
- 1.6 The patient will be able to choose their preferred doctors.
- 1.7 The patient will be able to provide feedback or reviews on the doctors.
- 1.8 The patient will be able to book appointments for their visits and cancel the said appointment within the next 5-6 hours.

## **2) Doctors Management:**

- 2.1 The doctors must register their accounts.
- 2.2 The doctors will be able to login to their accounts.
- 2.3 The doctors will be able to access the patients' past medical information.
- 2.4 The doctors will be able to give suggestions on the template based on the patient's past medical history and update if needed.
- 2.5 The doctors will be able to see their monthly salary.
- 2.6 The doctors will be able to update their qualifications.

## **3) Admin Management:**

- 3.1 The admin panel will give unique pins to the patients according to their preferred doctors.
- 3.2 Only the admin panel will be able to accept or reject the updated requests regarding the personal information of the patients.
- 3.3 The admin panel will send monthly reports/evaluations of the doctors to the higher authorities.
- 3.4 The admin panel will have to verify the doctors' recent qualification updates and then display it in their profiles.

## **4) System Management:**

- 4.1 The system will save each of the patient's preferred doctors in their database.
- 4.2 The system will auto-update the patient's database based on their wristbands.

- 4.3 The system will be able to show information to both the doctors and the patients themselves when requested.
- 4.4 The system will let the patient know about the approximated waiting time till their visit.
- 4.5 The system will send a notification to alert the patient 10 minutes prior to their visit.

## Non-Functional Requirements:

### 1) Operational:

- 1.1 The system should be capable of running on Android, Windows, MacOS and iOS.
- 1.2 The system should be accessible from both website and application.
- 1.3 The user interface of the software should be user friendly and a small tutorial walkthrough should be provided to the new users.
- 1.4 The system should be able to integrate if new features are added.
- 1.5 The system should be light so that it requires minimal hardware power.
- 1.6 The system should be able to access and store previous data.

### 2) Performance:

- 2.1 Any interaction between the system and the user should not exceed 2-4 seconds.
- 2.2 The system should be available for use 24 hours 365 days. Only routine maintenance breaks can be taken during non peak work hours after notifying the users beforehand.
- 2.3 The system should support around 300 simultaneous patients at a time.
- 2.4 Any booking appointments by the patients should be sent for approval within 1 minute.

### 3) Security:

- 3.1 Two factor (2FA) authentication when every user logs in.
- 3.2 Only the admin panel can access personal records of staff.
- 3.3 One patient will not be able to access the other patients' records.
- 3.4 The payment procedure should be done through a verified/ trustworthy system
- 3.5 Only the admin will have the authority to provide unique pins to the users when they register.
- 3.6 The system will include all available safeguards from viruses, Trojan horses, spyware, ransomware, etc.
- 3.7 Only the patients will be able to delete their feedback posts.

3.8 Only the admin panel will be able to hide the feedback posts if needed in order to prevent false allegations towards the hospital and its doctors.

#### **4) Cultural and Political:**

4.1 The system should be in both English and Bengali language.

4.2 Personal information of the users should be protected in compliance with the Data Protection Law of the country.